

DOCKET FILE COPY ORIGINAL

RECEIVED

MAY 15 1997

BEFORE THE  
Federal Communications Commission  
WASHINGTON, D.C.

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )

)  
Allocation and Designation of Spectrum )  
for Fixed-Satellite Services in the )  
37.5-38.5 GHz, 40.5-41.5 GHz, )  
and 48.2-50.2 GHz Frequency Bands; )  
Allocation of Spectrum to Upgrade Fixed )  
and Mobile Allocations in the )  
40.5-42.5 GHz Frequency Band, Allocation )  
of Spectrum in the 46.9-47.0 GHz )  
Frequency Band for Wireless Services; )  
and Allocation of Spectrum in the )  
37.0-38.0 GHz and 40.0-40.5 GHz for )  
Government Operations. )

IB Docket No. 97-95

RM-8811

COMMENTS OF  
WINSTAR COMMUNICATIONS, INC.

Philip L. Verveer  
Michael F. Finn  
C. Grace Campbell  
**WILLKIE FARR & GALLAGHER**  
Three Lafayette Centre  
1155 21st Street, N.W.  
Washington, D.C. 20036  
(202) 328-8000

Its Attorneys

Timothy R. Graham  
Leo I. George  
Joseph M. Sandri, Jr.  
Barry J. Ohlson  
**WINSTAR COMMUNICATIONS, INC.**  
1146 19th Street, N.W.  
Washington, D.C. 20036  
(202) 833-5678

May 5, 1997

24

BEFORE THE  
Federal Communications Commission  
WASHINGTON, D.C.

In the Matter of	)	
	)	
Allocation and Designation of Spectrum	)	IB Docket No. 97-95
for Fixed-Satellite Services in the	)	
37.5-38.5 GHz, 40.5-41.5 GHz,	)	RM-8811
and 48.2-50.2 GHz Frequency Bands;	)	
Allocation of Spectrum to Upgrade Fixed	)	
and Mobile Allocations in the	)	
40.5-42.5 GHz Frequency Band, Allocation	)	
of Spectrum in the 46.9-47.0 GHz	)	
Frequency Band for Wireless Services;	)	
and Allocation of Spectrum in the	)	
37.0-38.0 GHz and 40.0-40.5 GHz for	)	
Government Operations.	)	

**COMMENTS OF  
WINSTAR COMMUNICATIONS, INC.**

WinStar Communications, Inc. ("WinStar"), by its attorneys, hereby submits its comments in the above-captioned proceeding.

As discussed below, WinStar enthusiastically supports the Commission's proposed decision to preserve the 38.6-40.0 GHz band for terrestrial services. If adopted, that decision will permit both incumbent and new terrestrial licensees to continue to develop their service offerings and to eventually compete with the incumbent local exchange carriers ("ILECs").

**I. INTRODUCTION.**

WinStar was one of the first companies to be licensed and to utilize spectrum in the 38.6-40.0 spectrum band. WinStar is the holder of the largest amount of 38 GHz spectrum in the United States, and is utilizing this asset to build local telephone

networks for the transmission of voice, data and video traffic in the major metropolitan areas covered by WinStar's 38 GHz licenses. WinStar's licenses cover an aggregate of more than one hundred (100) cities with populations exceeding 100,000 each, and encompass an aggregate population of approximately 172 million. Furthermore, the 38 GHz licenses allow WinStar to provide Wireless Fiber services in forty-seven (47) of the fifty (50) most populated metropolitan statistical areas in the United States.

Through its wireless licenses, WinStar develops, markets, and delivers telecommunications services throughout the United States. WinStar is authorized as a competitive local exchange carrier ("CLEC") in twenty-one (21) jurisdictions and has applications pending in seven (7) other jurisdictions. Indeed, WinStar has already initiated commercial service as a CLEC in New York City and expects to be operating as a CLEC in at least twelve (12) major market areas by the close of 1997.

WinStar also has received authority to operate as a competitive access provider ("CAP") in 33 jurisdictions and has applications for intrastate authority pending in another four (4) jurisdictions. As of January 31, 1997, WinStar had forty (40) carrier customers, including, among others, Ameritech Cellular Services, MCI Communications, Pacific Bell and Teleport Communications.

**II. SEGMENTATION OF THE 38.6-40.0 GHz BAND IS APPROPRIATE AS SHARING IS INFEASIBLE BETWEEN TERRESTRIAL AND SATELLITE OPERATIONS IN THAT BAND.**

The Notice observes that "[g]iven the ubiquitous nature of some of the services proposed, it is not likely that satellite and terrestrial systems will be able to share the same spectrum without significant technical constraints on the operations of one or the other, or both, types of systems."<sup>1</sup> It also notes that "frequency sharing is an issue of some contention."<sup>2</sup> For that reason, the Notice proposes a band segmentation plan that, among other things, deletes satellite allocations in the 38.6-40.0 GHz band. WinStar strongly supports the Notice's conclusions for the 38.6-40.0 GHz band.<sup>3</sup>

WinStar and others have submitted numerous pleadings and engineering analyses documenting the significant problems inherent in sharing between terrestrial Fixed Service ("FS") and satellite operations. For example, WinStar submitted a study to the Commission prepared by Hatfield Associates that concluded that FS systems would be "frozen out" of large areas around

---

<sup>1</sup> See Allocation and Designation of Spectrum for Fixed-Satellite Services in the 37.5-38.5 GHz, 40.5-41.5 GHz, and 48.2-50.2 GHz Frequency Bands; Allocation of Spectrum to Upgrade Fixed and Mobile Allocations in the 40.5-42.5 GHz Frequency Band, Allocation of Spectrum in the 46.9-47.0 GHz Frequency Band for Wireless Services; and Allocation of Spectrum in the 37.0-38.0 GHz and 40.0-40.5 GHz for Government Operations, IB Docket No. 97-95, RM-8811 (rel. March 24, 1997) at ¶ 12.

<sup>2</sup> Id.

<sup>3</sup> WinStar's comments are currently designed to protect its domestic operations in the 38.6-40.0 GHz band.

satellite earth stations because of interference concerns.<sup>4</sup> The Hatfield study specifically addressed difficulties with sharing between FS and Fixed Satellite Service ("FSS") operations, and generally raises concerns regarding the difficulty of sharing between FS and ubiquitous satellite operations.

Satellite interests, notably Motorola, argue that sharing is feasible between the two services in the 38.6-40.0 band. However, WinStar and other terrestrial representatives submitted documents to the Ad Hoc Millimeter Wave ("AHMW") group of the Commission's 1997 World Radio Conference ("WRC-97") Advisory Committee and its smaller working groups clearly refuting those arguments.<sup>5</sup> Among other things, those documents revealed that FS services essentially would no longer be viable in the 38.6-40.0 GHz band if forced to operate in accordance with the severe operating constraints proposed by the satellite industry. Such technical constraints include limiting FS operations in terms of FS power density ("EIRP") and automatic transmission power control ("ATPC") restrictions.<sup>6</sup>

The AHMW and working group documents also made clear that segmentation is the best solution as it will eliminate interference problems and allow both FS and satellite services to

---

<sup>4</sup> See Attachment to Opposition of WinStar Communications, RM No. 8811 (June 20, 1996).

<sup>5</sup> WinStar also submitted various AHMW and working group documents in its ex parte letter to Chairman Hundt of December 16, 1996.

<sup>6</sup> Id.

be deployed to their full potential.<sup>7</sup> The Notice reaches a similar conclusion, stating that segmentation "would provide the various proposed systems [both FS and satellite] with the best opportunity to succeed."<sup>8</sup> That conclusion comports with the Commission's recent decision to segment the 27.5-30.0 GHz band.<sup>9</sup> The Commission took such action because (1) sharing was not possible between the terrestrial LMDS service and FSS operations,<sup>10</sup> and (2) segmentation would "provide maximum flexibility for system implementation, inter-system sharing, and future system growth."<sup>11</sup> As discussed above, sharing is similarly not possible in the 38.6-40.0 GHz band. Therefore, elimination of the FSS allocation in that band is entirely appropriate especially since FS licensees such as WinStar have been building out and operating their systems in the 38.6-40.0 GHz band for several years now.

---

<sup>7</sup> Id.

<sup>8</sup> See Notice at ¶ 12.

<sup>9</sup> See Rulemaking to Amend Parts 1, 2, 21 and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, FCC 96-311, CC Docket No. 92-297, *First Report and Order and Fourth Notice of Proposed Rulemaking*, (rel. July 22, 1996) ("LMDS First Order").

<sup>10</sup> See id. at ¶ 27 ("We conclude, based on the entire record before us, that co-frequency sharing between either GSO/FSS or NGSO/FSS ubiquitously deployed terminals and LMDS with its ubiquitously deployed subscriber terminals is not feasible at this time.").

<sup>11</sup> LMDS First Order at ¶ 41.

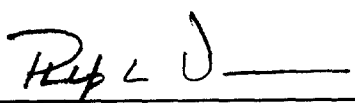
### III. CONCLUSION.

For the foregoing reasons, WinStar respectfully urges the Commission to eliminate the FSS allocations in the 38.6-40.0 GHz band.

Respectfully submitted,

**WINSTAR COMMUNICATIONS, INC.**

Timothy R. Graham  
Leo I. George  
Joseph M. Sandri, Jr.  
Barry J. Ohlson  
**WINSTAR COMMUNICATIONS, INC.**  
1146 19th Street, N.W.  
Washington, D.C. 20036  
(202) 833-5678

  
\_\_\_\_\_  
Philip L. Verveer  
Michael F. Finn  
C. Grace Campbell

**WILLKIE FARR & GALLAGHER**  
Three Lafayette Centre  
1155 21st Street, N.W.  
Washington, D.C. 20036  
(202) 328-8000

ITS ATTORNEYS

May 5, 1997